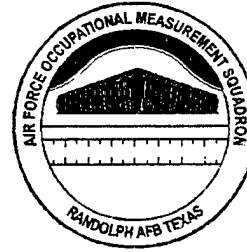




**UNITED STATES
AIR FORCE**



OCCUPATIONAL SURVEY REPORT



**DENTAL ASSISTANT
AFSC 4Y0X1**

OSSN: 2349

MARCH 1999

**OCCUPATIONAL ANALYSIS PROGRAM
AIR FORCE OCCUPATIONAL MEASUREMENT SQUADRON
AIR EDUCATION AND TRAINING COMMAND
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PREFACE

This report presents the results of an Air Force Occupational Survey of the Dental Assistant career ladder, Air Force Specialty Code (AFSC) 4Y0X1. Authority for conducting occupational surveys is contained in AFI 36-2623. Copies of this report and pertinent computer printouts are distributed to the Air Force Functional Manager, the technical training location, all using major commands (MAJCOMs), and other interested operations and training officials.

The survey instrument was developed by Mr. Michael F. Brosnan. Computer programming support was provided by Ms. Karen B. Tilghman and administrative support was provided by Mr. Richard G. Ramos. Second Lieutenant Andrew K. Hosler analyzed the data and wrote the final report. This report has been reviewed and approved by Lieutenant Colonel Roger W. Barnes, Chief, Airman Analysis Section, Occupational Analysis Flight, Air Force Occupational Measurement Squadron (AFOMS).

Additional copies of this report can be obtained by writing to AFOMS/OMYXI, 1550 5th Street East, Randolph AFB Texas 78150-4449, or by calling DSN 487-5543. For information on the Air Force occupational survey process or other on-going projects, visit our web site at <http://www.omsq.af.mil>.

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SUMMARY OF RESULTS

1. **Survey Coverage:** The Dental Assistant career ladder was surveyed to provide current job and task data for use in validating career ladder documents and training programs. Survey results are based on responses from 1,347 Active Duty members accounting for 76 percent of the total population surveyed.
2. **Specialty Jobs:** One cluster, which encompasses 5 patient-care jobs, and 5 “support” jobs were identified in the career ladder structure analysis. They include: Dental Generalist Cluster (including Entry-Level Exams Job, Preventive Dentistry Job, General Dentistry Job, Surgery Job, and Orthodontics Job), X-Ray Technician Job, Dental Instrument Processing Center (DIPC) Job, Records/Reception Job, Supervisor Job, and Supply Job. All but the Records/Reception Job, Supervisor Job, and Supply Job are technical in nature. Those three jobs are administrative or managerial in nature. The technical cluster and technical jobs account for 70 percent of the population. The cluster and jobs account for 96 percent of the population.
3. **Career Ladder Progression:** Skill-level progression for members of this AFSC is typical of most career ladders. Three-skill level personnel are generally considered the technicians. As personnel progress to the 5-skill level, they are respected as advanced technicians and are given more chances to supervise. Seven-skill level members are typically involved with supervision and management tasks as well as administration and training. Due to the single reply of 9-skill level personnel to the survey, a 9-skill level analysis was not accomplished.
4. **Training Analysis:** The current Specialty Training Standard (STS) accurately reflects the knowledge necessary throughout the career ladder. Several STS knowledge-coded entries should be reviewed for possible upgrade to a performance code based on survey results from the career field. All performance-coded entries in the Plan of Instruction (POI) are supported by survey data. Training personnel should review the POI tasks not referenced for possible additions to the POI. Several of these tasks reflect a high percentage of entry-level personnel performing.
5. **Job Satisfaction:** As is the case for most medical career fields, the major point of interest for the job satisfaction of dental assistants is their low retention intentions. Reenlistment intentions across all enlistment categories are well below the targets set by USAF. Personnel in the DIPC and Entry-Level Exams jobs appear to be the least satisfied in the career field. Personnel in the career field do wear white uniforms. Forty-seven percent of the respondents say they wear white uniforms at least once a week.

6. **Implications:** Survey results indicate the present classification structure accurately portrays the jobs performed and requirements of the career ladder. Career ladder progression follows a typical path of technical involvement at the lower skill levels through supervisory involvement at the higher skill levels. Training documents appear to be well supported by survey data with some review warranted for proficiency coding. Several tasks not referenced to the POI should be considered for addition to the 3-skill level course. Job satisfaction ratings appear to be related to a member's specialty job rather than their time in service. Nearly all categories studied within the career ladder have low reenlistment intentions.

**OCCUPATIONAL SURVEY REPORT (OSR)
DENTAL ASSISTANT
(AFSC 4Y0X1)**

INTRODUCTION

This is a report of an occupational survey of the Dental Assistant career ladder conducted by the Air Force Occupational Measurement Squadron (AFOMS). Survey data will be used to identify current utilization patterns among career ladder personnel and evaluate career ladder documents and training programs. This is the first recorded OSR published for the Dental Assistant career ladder, though a previous Job Inventory and Training Extract is available.

Background

As described in the AFMAN 36-2108, *Airman Classification*, 31 October 1998, *Specialty Summary*, last changed 30 April 1995, Dental Assistant personnel perform paraprofessional tasks, oral hygiene duties, and supervise dental assistant functions. Among these tasks are items such as assisting the dental officer with patient treatment, exposing and processing dental radiographs, performing dental administrative and materiel duties, and inspecting and evaluating dental activities.

Personnel entering the AFSC 4Y0X1 career ladder must attend the Dental Assistant Apprentice course at Sheppard AFB TX lasting 44 academic days. Upon completion of this AFSC awarding course, the graduate is awarded the 3-skill level. Entry into this career ladder currently requires an Armed Forces Vocational Aptitude Test Battery score of General - 43; a strength factor of "G" (Weight lift of 40 lbs) is also required. Personnel must be at least 18 years of age and have normal color vision as defined in AFI 48-123, *Medical Examination and Standards* to enter the career field.

SURVEY METHODOLOGY

Inventory Development

The data collection instrument for this occupational survey was USAF Job Inventory (JI) Occupational Survey Study Number 2349, dated July 1998. A tentative task list was prepared after reviewing pertinent tasks from the previous survey instrument and data from the last

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Training Extract. The preliminary task list was refined and validated through personal interviews with 29 subject-matter experts (SMEs) at the following training location and operational installations:

<u>BASE</u>	<u>UNIT VISITED</u>
Sheppard AFB TX	381 TRS
Randolph AFB TX	12 DS
Lackland AFB TX	59 DS

The resulting JI contains a comprehensive listing of 408 tasks grouped under 9 duty headings, and a background section of twenty questions requesting such information as grade, base, major command (MAJCOM) assigned, job title, work or functional area, medical or dental facility, wear of medical whites, Dental Assistant National Board certification, and equipment used or operated.

Survey Administration

From July 1998 through December 1998, base training offices at operational units worldwide administered the inventory via floppy disks to 1,765 eligible AFSC 4Y0X1 personnel. To qualify for the survey, personnel were required to hold a duty AFSC of 4Y031, 4Y051, 4Y071, or 4Y090. Excluded from the survey were personnel in PCS, student, or hospital status, or with less than 6 weeks on the job. Job incumbents were selected from a computer-generated mailing list obtained from personnel data tapes maintained by the Air Force Personnel Center, Randolph AFB TX.

Each individual who completed the inventory first completed an identification and biographical information section and then checked each task performed in his or her current job. After checking all tasks performed, each member then rated each of these tasks on a 9-point scale, showing relative time spent on that task, as compared to all other tasks checked. The ratings ranged from 1 (very little time spent) through 5 (about average time spent) to 9 (very great time spent). To determine relative time spent for each task checked by a respondent, all of the incumbent's ratings are assumed to account for 100 percent of his or her time spent on the job and are summed. Each task rating is then divided by the total task ratings and multiplied by 100 to provide a relative percentage of time for each task. This procedure provides a basis for comparing tasks in terms of both percent members performing and average percent time spent.

Survey Sample

Personnel were selected to participate in this survey so as to ensure an accurate representation across MAJCOMs and military paygrade groups. All eligible Active Duty AFSC 4Y0X1 personnel were mailed survey disks. Table 1 reflects the percentage distribution, by MAJCOM, of assigned AFSC 4Y0X1 personnel as of August 1998. The 1,347 respondents in the final sample represent 67 percent of the total assigned personnel and 76 percent of the total personnel surveyed. Table 2 reflects the paygrade distribution for these AFSC 4Y0X1 personnel.

TABLE 1

COMMAND DISTRIBUTION OF AFSC 4Y0X1 PERSONNEL

COMMAND	PERCENT OF ASSIGNED*	PERCENT OF SAMPLE
ACC	19	19
AETC	20	22
11TH WING	2	1
AFMC	13	13
AFSOC	1	#
AFSPC	4	4
AMC	14	14
PACAF	13	13
USAFA	2	1
USAFE	12	12

TOTAL ASSIGNED = 2,024*

TOTAL SURVEYED = 1,765**

TOTAL IN SURVEY SAMPLE = 1,347

PERCENT OF ASSIGNED IN SAMPLE = 67%

PERCENT OF SURVEYED IN SAMPLE = 76%

* Assigned strength as of August 1998

** Excludes personnel in PCS, student, or hospital status, or less than 6 weeks on the job

Denotes less than 1 percent

TABLE 2

PAYGRADE DISTRIBUTION OF SURVEY SAMPLE

GRADE	PERCENT OF ASSIGNED*	PERCENT OF SAMPLE
E-1 - E-3	23	23
E-4	27	27
E-5	28	29
E-6	12	12
E-7	9	8
E-8	**	**

* Assigned strength as of August 1998

** Denotes less than 1 percent

Both MAJCOM and Paygrade distributions of the survey sample nearly match the percent assigned. This indicates a proper stratified sample which qualifies as a true representation of the career ladder population.

Task Factor Administration

Job descriptions alone do not provide sufficient data for making decisions about career ladder documents or training programs. Task factor information is needed for a complete analysis of the career ladder. To obtain the necessary task factor data, several senior AFSC 4Y0X1 personnel also completed a second disk survey for either training emphasis (TE) or task difficulty (TD) ratings. These disks were processed separately from the JI surveys. The results of the task factor information are used in several analyses discussed in more detail within the report.

Training Emphasis (TE): TE is an appraisal of the amount of emphasis that should be placed on tasks in basic career ladder training. The 35 senior NCOs who completed a TE disk survey were asked to pick tasks which they felt require structured training for entry-level personnel and

then rate how much emphasis should be placed on each selected task, ranging from 1 (extremely low emphasis) to 9 (extremely high emphasis). Structured training is defined as training provided at resident training schools, field training detachments, mobile training teams, formal on-the-job training (OJT), or any other organized training method. Interrater agreement for these 35 raters was acceptable. The average TE rating was 3.56, with a standard deviation of 2.33. Any task with a TE rating of 5.89 or greater is considered to have high TE. Similarly, any task with a TE rating of 1.23 or less is considered to have low TE.

Task Difficulty (TD): TD is an estimate of the amount of time needed to learn how to do each task satisfactorily. The 46 senior NCOs who completed TD survey disks were asked to rate the difficulty of each task using a 9-point scale (extremely low to extremely high). Interrater reliability was acceptable. Ratings were standardized so tasks have an average difficulty of 5.00 and a standard deviation of 1.00. Any task with a TD rating of 6.00 or above is considered to be difficult to learn.

When used in conjunction with the primary criterion of percent members performing, TE and TD ratings can provide insight into first-enlistment personnel training requirements. Such insights may suggest a need for lengthening or shortening portions of instruction supporting entry-level jobs.

SPECIALTY JOBS

The first step in the analysis process is to identify the structure of the career ladder in terms of the jobs performed by the respondents. The Comprehensive Occupational Data Analysis Program (CODAP) assists by creating an individual job description for each respondent based on the tasks performed and relative amount of time spent on these tasks. The CODAP automated job clustering program then compares all the individual job descriptions, locates the two descriptions with the most similar tasks and time spent ratings, and combines them to form a composite job description. In successive stages, CODAP either adds new members to this initial group, or forms new groups based on the similarity of tasks and time spent ratings.

The basic group used in the hierarchical clustering process is the **Job**. When two or more jobs have a substantial degree of similarity, in tasks performed and time spent on tasks, they are grouped together and identified as a **Cluster**. The structure of the career ladder is then defined in terms of jobs and clusters of jobs.

Overview of Specialty Jobs

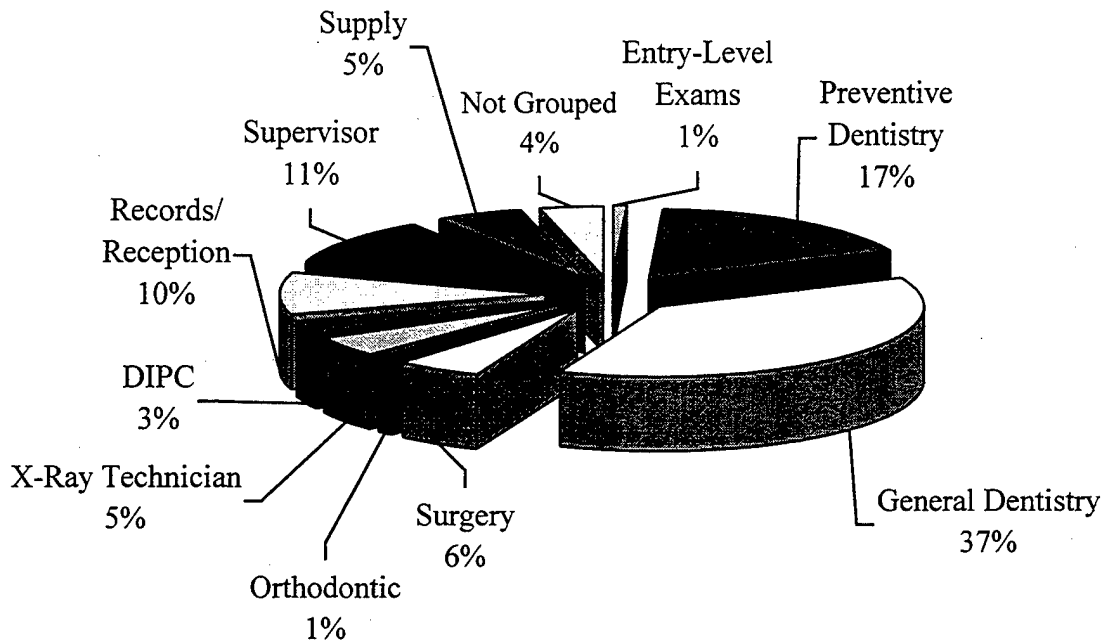
Based on the analysis of tasks performed and the amount of time spent performing each task, one cluster with five jobs and five independent jobs were identified within the career ladder. Figure 1 illustrates the cluster and jobs performed by AFSC 4Y0X1 personnel.

A listing of the cluster and jobs is provided below. The stage (ST) number shown beside each title references computer printed information, the letter "N" indicates the number of personnel in each group.

- I. DENTAL GENERALIST CLUSTER (ST024, N=849)
 - A. Entry-Level Exams Job (ST047, N=13)
 - B. Preventive Dentistry Job (ST058, N=234)
 - C. General Dentistry Job (ST082, N=504)
 - D. Surgery Job (ST112, N=71)
 - E. Orthodontics Job (ST093, N=15)
- II. X-RAY TECHNICIAN JOB (ST072, N=61)
- III. DENTAL INSTRUMENT PROCESSING CENTER (DIPC) JOB (ST057, N=43)
- IV. RECORDS/RECEPTION JOB (ST055, N=130)
- V. SUPERVISOR JOB (ST046, N=144)
- VI. SUPPLY JOB (ST073, N=70)

The respondents forming these jobs and clusters account for 96 percent of the survey sample. The remaining 4 percent, for one reason or another, did not group into one of these jobs or clusters. Examples of job titles for these personnel include CDC Writer and Instructors of various types.

AFSC 4Y0X1 CAREER LADDER SPECIALTY JOBS (N = 1,347)



- Dental Generalist Cluster represented by Entry-Level Exams, Preventive Dentistry, General Dentistry, Surgery, and Orthodontic jobs.

FIGURE 1

Group Descriptions

The following paragraphs contain brief descriptions of the jobs and clusters identified through the career ladder structure analysis. Table 3 presents the relative time spent on duties by members of these specialty jobs and clusters. Selected background data for these jobs and clusters are provided in Table 4. Representative tasks for all the groups are contained in Appendix A.

I. DENTAL GENERALIST CLUSTER (ST024). The 849 airmen performing within this cluster (63 percent of the survey sample) represent the core of the career ladder. These personnel reported a high number of tasks performed with 118 on average which is representative of their diversity. There were five jobs identified within the

Composition:
 849 personnel
 36% E-4, 25% E-3, 24% E-5
 52% in first enlistment
 Average 72 months TAFMS
 Average 118 tasks performed

cluster, the two largest being General Dentistry (504 airmen) and Preventive Dentistry (234 personnel). The remaining 3 jobs are Entry-Level Exams (13 personnel), Surgery (71 personnel), and Orthodontics (15 personnel). These 5 jobs will be discussed later in this report. Personnel in this cluster spend a high percentage (45 percent) of their time with Duty A, Performing Dental Assistant Activities. They spend 18 percent of their time with Duty D, Performing Preventive Dentistry Activities, and 14 percent of their time maintaining treatment areas, equipment, and instruments, Duty B. Distinctive tasks performed include:

- Set up or break down Dental Treatment Rooms (DTRs)
- Seat patients and/or dismiss patients
- Maintain DTR supply levels
- Clean DTR supply storage areas
- Retract patient cheeks, lips, or oral tissues
- Drape patients, other than for surgical procedures
- Assist with exams, screenings, or preliminary diagnostic procedures

Fifty-one percent of these airmen hold the 3-skill level, 45 percent the 5-skill level, and only 4 percent the 7-skill level. These personnel average 6 years total active federal military service (TAFMS) and slightly more than 5 years in the career field. Thirty-six percent of the personnel in the cluster hold the E-4 paygrade, while 25 and 24 percent hold the E-3 and E-5 paygrades, respectively. Fifty-two percent of the airmen in this cluster are in their first enlistment.

There are five distinct jobs within this cluster that are separated by the type and frequency of the tasks performed. The **Entry-Level Exams Job** is defined by the high percent of their time spent (71 percent) performing the Dental Assistant Activities of Duty C. Furthermore, their relatively lower number of tasks performed (average of 39 tasks) and TAFMS (just over 2 years on average) speak to their entry-level status. Representative tasks performed by members of this job include:

Composition:
 13 personnel
 38% E-2, 38% E-3, 15% E-4
 85% in first enlistment
 Average 28 months TAFMS
 Average 39 tasks performed

- Perform 4-handed dentistry
- Assist with general dentistry procedures
- Set up or break down Dental Treatment Rooms (DTRs)
- Turn in instruments or hand pieces to dental instrument processing center (DIPC)
- Maintain DTR supply levels
- Prepare rubber dam clamps
- Assist with placing temporary restorations

Seventy-seven percent of the personnel in the job hold the 3-skill level, while the remaining 23 percent are 5-skill level members. They have just over 2 years time in the career field and 85 percent are in their first enlistment. The predominant paygrades are E-2 and E-3, with 38 percent of the job's members in each. E-4 personnel account for 15 percent of the personnel in the job.

The **Preventive Dentistry Job** is comprised of members performing an average of 87 tasks. They spend 41 percent of their time in the duty that defines them, Duty D, Performing Preventive Dentistry Activities. They are part of the cluster, however, and perform in the Dental Assistant Duty C, 23 percent of the time. These personnel spend a lot of their time briefing patients on tooth care, removing calculus from teeth, and giving fluoride treatments. Representative tasks for personnel in this job follow:

Composition:
234 personnel
39% E-4, 38% E-5, 14% E-3
29% in first enlistment
Average 99 months TAFMS
Average 87 tasks performed

- Brief patients on formation of plaque and dental disease
- Evaluate patient oral hygiene techniques
- Remove calculus from teeth using hand instruments
- Identify presence of calculus on radiographs
- Set up or break down Dental Treatment Rooms (DTRs)
- Sharpen periodontal scaling instruments
- Polish teeth with rubber cups

Most personnel in this job hold the 5-skill level (65 percent). Three- and 7-skill level personnel account for 28 and 6 percent of the members, respectively. Personnel average 8 years TAFMS and 7 years in the career field. The predominant paygrades of this job are E-4 with 39 percent and E-5 with 38 percent. Only 29 percent of the members are in their first enlistment.

The main job in the cluster is the **General Dentistry Job**. Personnel in this job perform an average of 140 tasks, more than any other job in the specialty exhibiting their general dental assistant diversity. Fifty-two percent of their time is spent on Duty C, Dental Assistant activities. Fourteen percent of their time is spent on Duty B, Maintaining Treatment Areas, Equipment, and Instruments, and 12 percent of their time is spent on Duty E, Dental Radiography. Tasks which represent the General Dentistry Job are listed below:

Composition:
504 personnel
33% E-4, 33% E-3, 16% E-5
68% in first enlistment
Average 56 months TAFMS
Average 140 tasks performed

- Set up and break down the Dental Treatment Rooms
- Perform 4-handed dentistry
- Seat and/or dismiss patients
- Assist with general dentistry procedures

- Maintain DTR supply levels
- Clean DTR supply storage areas
- Select and arrange instruments

Though these tasks appear similar to those performed by Entry-Level Exams Job personnel, this job is differentiated by the high number of tasks performed as well as a slight difference among experience factors. General Dentistry personnel average approximately 4.5 years TAFMS and 4 years in the career field. Sixty-five percent of the members hold the 3-skill level. Twenty-three percent and 3 percent hold the 5- and 7-skill levels, respectively. E-3 and E-4 personnel each account for 33 percent of the specialty job. Sixty-eight percent of the airmen in the job are in their first enlistment.

The **Surgery Job** contains members that average 93 tasks performed. Though they spend much of their time in the same duties in which other personnel in the cluster participate, many of their tasks are geared towards dental surgical procedures. A majority of their duty time is spent working on the dental assistant activities of Duty C (56 percent), followed by 14 percent of their time in Duty B, maintaining the treatment areas, equipment, and instruments. Seven percent of their time is spent on each of Duties D and E, preventive dentistry and dental radiography. Below are some tasks representative of the job these airmen perform:

<p>Composition: 71 personnel 48% E-4, 32% E-5, 11% E-3 30% in first enlistment Average 91 months TAFMS Average 93 tasks performed</p>
--

- Scrub for surgical procedures in DTR
- Assist with IV sedations
- Retract patient cheeks, lips, or oral tissue
- Drape patients for surgical procedures in DTR
- Assist with clinical oral surgery procedures
- Prepare suturing materials
- Select and arrange instruments

Sixty-two percent of the personnel in this job hold the 5-skill level, 32 percent hold the 3-skill level, and the final 6 percent hold the 7-skill level. Personnel average 7.5 years TAFMS and 6.5 years in the career field. The paygrade distribution is as follows: 48 percent are E-4, 32 percent are E-5, 11 percent are E-3, and 9 percent are E-6. Thirty percent of the members of the job are in their first enlistment.

The final job in the cluster is the **Orthodontics Job**. Members of this job perform an average of 91 tasks. Similar to other jobs in the cluster, Orthodontics personnel spend much of their time in Duty C, Dental Assistant Activities (57 percent), and Duty B, Maintaining Treatment Areas, Equipment, and Instruments (14 percent). They also spend 9 percent of their

time with preventive dentistry activities of Duty D. However, they differentiate themselves because of the specific tasks they perform. Brackets, archwires, and elastics are just a few of the items used by members of this job that other personnel in the cluster do not use. Some of the representative tasks performed by Orthodontics personnel can be seen below:

Composition:
15 personnel
53% E-4, 40% E-5, 7% E-3
14% in first enlistment
Average 99 months TAFMS
Average 91 tasks performed

- Set up or break down DTRs
- Prepare brackets for bonding
- Assist with orthodontic procedures
- Seat and/or dismiss patients
- Select and arrange instruments
- Secure archwires with ligatures or elastics
- Assist with placing brackets on teeth

Five-skill level personnel account for 73 percent of the job, while the remaining 23 percent are 3-skill level workers. Personnel average 8.2 years TAFMS and 6.5 years in the career field. Only 14 percent of the personnel in the job are in their first enlistment. A majority of the airmen in the job are in the paygrade E-4 (53 percent), while 40 percent are E-5 personnel and 7 percent are E-3 airmen.

II. **X-RAY TECHNICIAN JOB (ST072)**. Sixty-one airmen group together to form this job. The personnel who comprise this job perform an average of 64 tasks. They primarily perform tasks under the Duty Title E, Dental Radiography, as it accounts for 59 percent of their time. Another 12 percent of their time is spent on management and supervisory tasks of Duty G, followed by dental assistant activities of Duty C, which accounts for 8 percent of their time. Representative tasks performed by these incumbents include:

Composition:
61 personnel
52% E-5, 20% E-6, 18% E-4
11% in first enlistment
Average 132 months TAFMS
Average 64 tasks performed

- Develop radiographic film
- Mount and label dental radiographs
- Shield patients from radiation
- Expose dental radiographs
- Place or remove infection control barriers on X-ray equipment
- Inspect quality of diagnostic radiographs
- Disinfect X-ray units and chairs

Personnel in this job are mostly 5-skill level technicians (70 percent), however, 3- and 7-skill level personnel account for 15 percent each. These airmen are averaging almost 11 years TAFMS and 9 years in the career field. The paygrade distribution further exemplifies their senior technician appearance; 52 percent are E-5, 20 percent are E-6, and 18 percent are E-4 personnel. Only 11 percent of the members are in their first enlistment.

III. DENTAL INSTRUMENT PROCESSING CENTER (DIPC) JOB (ST057).

The 43 personnel comprising this job perform the lowest number of tasks for any job or cluster in the sample, with 28 on average. Sixty-five percent of their time is spent in Duty B, maintaining treatment areas, equipment, and instruments. An additional 12 percent of their time is spent on management and supervisory tasks listed under Duty G. These airmen are responsible for sterilization of dental equipment and instruments. Representative tasks performed by these personnel follow:

Composition:

43 personnel
49% E-5, 28% E-4, 9% E-6
25% in first enlistment
Average 107 months TAFMS
Average 28 tasks performed

- Prepare kits, packs, and trays for sterilization
- Sterilize and disinfect dental instruments
- Lubricate hand pieces
- Perform sterilization testing procedures
- Sterilize dental supplies, such as cotton rolls or gauze
- Clean dental instruments and sterilizers
- Review expiration dates of dental instruments, packs, or materials

Five-skill level members account for 72 percent of the job, while 21 percent are 3-skill level personnel, and the remaining 7 percent hold the 7-skill level. These airmen average 9.6 years TAFMS and 8 years in the career field. E-5 personnel account for 49 percent of the job and E-4 personnel account for another 28 percent. Twenty-five percent of the personnel in the job are in their first enlistment.

IV. RECORDS/RECEPTION JOB (ST055). The 130 members of this job perform an average of 31 tasks. These personnel tend to be more senior than those in the jobs listed previously. Their seniority and tendency to practice administrative tasks in their job separate them from others. Fifty-two percent of their time is spent on Duty I, Performing General Administrative Activities. Twenty-five percent of the time they perform the management and supervisory tasks of Duty G. Some of the tasks which best represent this job are listed below:

Composition:

130 personnel
47% E-5, 28% E-6, 15% E-4
9% in first enlistment
Average 140 months TAFMS
Average 31 tasks performed

- Schedule patients for appointments
- Initiate, inventory, and file dental health records
- Verify patient eligibility for care
- Retire dental health records of dependents or retirees
- Monitor AF dental readiness assurance programs
- Produce computer-generated documents, such as forms
- Identify dental readiness classification

Personnel in this job primarily hold the 5-skill level (57 percent), however, 30 percent also hold the 7-skill level and 13 percent hold the 3-skill level. These airmen average 11.7 years TAFMS and 10.7 years in the career field. Personnel generally categorize into either the E-5 (47 percent) or E-6 (28 percent) paygrades. Nine percent of the job members are in their first enlistment.

V. **SUPERVISOR JOB (ST046).** These 144 personnel perform an average of 68 tasks. A majority of their time is spent with management and supervisory activities, Duty G (55 percent), but general administrative, Duty I, and training activities, Duty H, also account for 17 and 15 percent of their time, respectively. These people play a general supervisory role within the dental assistant career ladder.

<p>Composition: 144 personnel 55% E-7, 24% E-6, 19% E-5 0% in first enlistment Average 197 months TAFMS Average 68 tasks performed</p>

They are responsible for people and equipment. Ninety-seven percent of the members of this job are supervising other personnel. Several representative tasks performed by members of this job follow:

- Write or endorse military performance reports
- Counsel subordinates concerning personal matters
- Write recommendations for awards or decorations
- Produce computer-generated documents, such as forms
- Inspect and evaluate personnel for compliance with standards
- Evaluate personnel for promotion, demotion, reclassification, or special awards
- Conduct supervisory orientations for newly assigned personnel

This group is the most experienced of the jobs and clusters in the sample. Seventy-eight percent of the incumbents hold the 5-skill level, while another 22 percent hold the 7-skill level. The only 9-skill level respondent in the survey is represented in this job. Personnel average 16.3 years TAFMS and 14.7 years in the career field. They primarily hold the paygrade E-7 (55

percent), however, 24 percent are E-6 personnel. No personnel in this job are in their first enlistment.

VI. **SUPPLY JOB (ST073).** Seventy airmen form this job. They perform an average of 84 tasks, the top 20 of which are directly related to supply. In all, 48 percent of their time is spent on dental supply activities, Duty A, followed by 24 percent of their time in management or supervisory activities of Duty G. This senior group of airmen differentiated themselves with their focus on supply and supervision. Ninety-four percent of the incumbents supervise other personnel. Some of the representative tasks performed by members of this job are shown below:

Composition: 70 personnel 46% E-5, 46% E-6, 7% E-7 0% in first enlistment Average 170 months TAFMS Average 84 tasks performed
--

- Order dental supplies
- Coordinate procurement of equipment and supplies with appropriate agencies
- Order nonmedical supplies
- Pick up or deliver equipment or supplies
- Research information in commercial supply publications
- Draft or write justifications for supply-related matters
- Evaluate supply problems

This group contains very experienced personnel. Five-skill level workers make up the majority of the job with 59 percent of the personnel. Seven-skill level workers account for 40 percent. Airmen in this job average 14.2 years in the service and 13 years in the career field. E-5 and E-6 paygrades have equal representation in the job with 46 percent each. There are no personnel in the first enlistment.

Summary

Though the 1,347 respondents all have the 4Y0X1 duty AFSC of Dental Assistants, not all personnel are accomplishing the same tasks. Throughout the career field, airmen separate into specific and measurable jobs. Most personnel can be considered technicians (Dental Generalist Cluster); however, even they have divisions of responsibilities amongst themselves with five distinct jobs. Other technical airmen are strictly responsible for x-rays and the Dental Instrument Processing Center. Senior personnel are given the jobs of Records/Reception, Supervisor, or Supply personnel.

TABLE 3

RELATIVE PERCENT TIME SPENT ON DUTIES BY SPECIALTY JOBS

DUTIES	DENTAL GENERALIST CLUSTER (ST024) (N=849)	ENTRY LEVEL EXAMS JOB (ST047) (N=13)	PREVENT DENTISTRY JOB (ST058) (N=234)	GENERAL DENTISTRY JOB (ST082) (N=504)	SURGERY JOB (ST112) (N=71)	ORTHO- DONTIC JOB (ST093) (N=15)
A PERFORMING DENTAL SUPPLY ACTIVITIES	2	3	1	2	2	2
B MAINTAINING TREATMENT AREAS, EQUIPMENT, AND INSTRUMENTS	14	14	14	14	14	14
C PERFORMING DENTAL ASSISTANT ACTIVITIES	45	71	23	52	56	57
D PERFORMING PREVENTIVE DENTISTRY ACTIVITIES	18	1	41	10	8	9
E PERFORMING DENTAL RADIOGRAPHIC ACTIVITIES	10	6	7	12	7	2
F PERFORMING MEDICAL READINESS ACTIVITIES	2	1	2	3	3	2
G PERFORMING MANAGEMENT AND SUPERVISORY ACTIVITIES	3	0	5	2	4	7
H PERFORMING TRAINING ACTIVITIES	2	0	3	1	2	3
I PERFORMING GENERAL ADMINISTRATIVE ACTIVITIES	4	4	4	4	4	4
(CONTINUED FROM ABOVE)						
DUTIES	X-RAY TECH JOB (ST072) (N=61)	DIPC JOB (ST057) (N=43)	RECORDS/ RECEPTION JOB (ST055) (N=130)	SUPER- VISOR JOB (ST046) (N=144)	SUPPLY JOB (ST073) (N=70)	
A PERFORMING DENTAL SUPPLY ACTIVITIES	3	7	0	3	48	
B MAINTAINING TREATMENT AREAS, EQUIPMENT, AND INSTRUMENTS	4	65	1	1	8	
C PERFORMING DENTAL ASSISTANT ACTIVITIES	8	3	8	3	5	
D PERFORMING PREVENTIVE DENTISTRY ACTIVITIES	1	1	1	0	1	
E PERFORMING DENTAL RADIOGRAPHIC ACTIVITIES	59	3	0	2	3	
F PERFORMING MEDICAL READINESS ACTIVITIES	2	2	3	4	2	
G PERFORMING MANAGEMENT AND SUPERVISORY ACTIVITIES	12	13	25	55	24	
H PERFORMING TRAINING ACTIVITIES	6	5	10	15	5	
I PERFORMING GENERAL ADMINISTRATIVE ACTIVITIES	5	1	52	17	4	
	15					

TABLE 4

SELECTED BACKGROUND DATA FOR SPECIALTY JOBS

	DENTAL GENERALIST CLUSTER (ST024)	ENTRY-LVL EXAMS JOB (ST047)	PREVENT DENTISTRY JOB (ST058)	GENERAL DENTISTRY JOB (ST082)	SURGERY JOB (ST112)	ORTHO- DONTICS JOB (ST093)
NUMBER IN GROUP	849	13	234	504	71	15
PERCENT OF SAMPLE	63%	1%	17%	37%	5%	1%
PERCENT IN CONUS	72%	54%	70%	74%	72%	33%
DAFSC DISTRIBUTION:						
4Y031	51%	77%	28%	65%	32%	27%
4Y051	45%	23%	65%	33%	62%	73%
4Y071	4%	0	7%	2%	6%	0
4Y090	0	0	0	0	0	0
AVERAGE MONTHS IN CAREER FIELD	64	25	89	51	81	80
AVERAGE MONTHS IN SERVICE	72	28	99	56	91	99
PERCENT IN FIRST ENLISTMENT (1-48 MOS TAFMS)	52%	85%	29%	68%	30%	14%
PERCENT SUPERVISING	27%	8%	46%	17%	38%	47%
AVERAGE NUMBER OF TASKS PERFORMED	118	39	87	140	93	91

(CONTINUED FROM ABOVE)

	X-RAY TECH JOB (ST072)	DIPC JOB (ST057)	RECORDS/ RECEPTION JOB (ST055)	SUPERVISOR JOB (ST046)	SUPPLY JOB (ST073)
NUMBER IN GROUP	61	43	130	144	70
PERCENT OF SAMPLE	5%	3%	10%	11%	5%
PERCENT IN CONUS	75%	67%	69%	75%	74%
DAFSC DISTRIBUTION:					
4Y031	15%	21%	13%	0	1%
4Y051	70%	72%	57%	22%	59%
4Y071	15%	7%	30%	77%	40%
4Y090	0	0	0	1%	0
AVERAGE MONTHS IN CAREER FIELD	109	97	130	176	156
AVERAGE MONTHS IN SERVICE	132	107	140	197	170
PERCENT IN FIRST ENLISTMENT (1-48 MOS TAFMS)	11%	25%	9%	0	0
PERCENT SUPERVISING	74%	51%	78%	97%	94%
AVERAGE NUMBER OF TASKS PERFORMED	64	28	31	68	84

ANALYSIS OF DAFSC GROUPS

An analysis of DAFSC groups, in conjunction with the analysis of the career ladder structure, is an important part of each occupational survey. The DAFSC analysis identifies differences in tasks performed at the various skill levels. This information may then be used to evaluate how well career ladder documents, such as the AFMAN 36-2108 *Airman Classification*, Specialty Description and the Career Field Education and Training Plan, reflect what career ladder personnel are actually doing in the field.

The distribution of skill-level groups across the career ladder jobs is displayed in Table 5, while Table 6 offers another perspective by displaying the relative percent time spent on each duty across skill-level groups. These tables reflect the distribution of all personnel in the survey. A typical pattern of progression is noted within the AFSC 4Y0X1 career ladder. Personnel at the 3- and 5-skill levels work in the technical jobs of the career ladder and spend most of their time on technical tasks. As incumbents move up to the 7-skill level they perform supervisory tasks and spend very little time on technical tasks.

Skill-Level Descriptions

DAFSC 4Y031. Representing 36 percent of the survey sample, these 481 airmen perform an average of 107 tasks. Sixty-eight percent of this group work in the General Dentistry Job (Table 5) while an additional 14 percent perform in the Preventive Dentistry Job. Five percent of 3-skill level personnel group into the Surgery Job and 4 percent work in the Records/Reception Job.

Table 6 reflects the percent time spent on duties by DAFSC 4Y031 personnel. At the 3-skill level, their time is distributed among the technical tasks of duties B-E. Representative tasks performed by these members are listed in Table 7. Technical tasks, not surprisingly, account for most of these.

DAFSC 4Y051. The core of the career ladder are 5-skill level airmen. Their 619 members compose 46 percent of the survey sample. They perform an average of 92 tasks. These personnel are scattered throughout all of the specialty jobs (Table 5), however, 27 percent and 25 percent, respectively, perform in the General Dentistry and Preventive Dentistry jobs. Twelve percent of the members perform in the Records/Reception Job. Surgery, X-Ray Technician, and Supply each account for 7 percent of the skill-level airmen.

Table 6 denotes the duties in which 5-skill level personnel spend their time. Their time is spread across several different duties representing their experience and changing responsibilities. Table 8 lists representative tasks performed by these DAFSC 4Y051 personnel. Table 9 reflects those tasks which best differentiate the airmen holding 3-skill levels from the airmen holding

5-skill levels. This table shows that, while the 3-skill levels and 5-skill levels perform similar tasks, 3-skill level personnel are more concerned with technical dentistry procedures and 5-skill level airmen are more concerned with supervisory and training activities.

DAFSC 4Y071. These 246 members perform an average of 72 tasks and represent 18 percent of the survey sample. Table 5 shows the highest percentage of members (46 percent) are in the Supervisor Job. However, the Records/Reception Job accounts for 16 percent of the skill level members, and the Supply Job also contains 11 percent of the DAFSC personnel.

Table 6 reflects the percent time spent on duties by DAFSC 4Y071 members. Due to their experience, management and supervisory, administration, and training activities are the main components of their time. Very little of their time, comparatively, is spent on the technical tasks of the career field.

Representative tasks performed by 7-skill level members are reflected in Table 10. Table 11 displays those tasks which best differentiate between 5- and 7-skill levels. This table clearly shows the much higher devotion to management and supervisory tasks at the 7-skill level than the 5-skill level.

DAFSC 4Y090. The survey respondents included a single 9-skill level member. No analysis will be done on the 9-skill level because of the low number.

Summary

Progression of airmen through the Dental Assistant career ladder follows a typical pattern of highly technical job focus at the 3-skill level, with supervision and management broadening through the 7-skill level. Personnel at the 3-skill level are perfecting their skills in the General Dentistry Job primarily. Personnel hold a variety of primarily technical jobs as they gain the 5-skill level. Towards the end of their tenure in the 5-skill level and into the 7-skill level, airmen are pulled further away from the technical duties of the career field and given the responsibilities of management, supervision, and administration. There are no glaring anomalies in the pattern of progression.

TABLE 5

DISTRIBUTION OF DAFSC GROUP MEMBERS ACROSS SPECIALTY JOBS
(PERCENT MEMBERS PERFORMING)

<u>SPECIALTY JOBS</u>	4Y031 (N=481)	4Y051 (N=619)	4Y071 (N=246)
I. ENTRY-LEVEL EXAMS JOB	2	*	0
II. PREVENTIVE DENTISTRY JOB	14	25	6
III. GENERAL DENTISTRY JOB	68	27	5
IV. SURGERY JOB	5	7	2
V. ORTHODONTICS JOB	*	2	0
VI. X-RAY TECHNICIAN JOB	2	7	4
VII. DIPC JOB	2	5	1
VIII. RECORDS/ RECEPTION JOB	4	12	16
IX. SUPERVISOR JOB	0	5	46
X. SUPPLY JOB	0	7	11
XI. OTHER (Includes ungrouped and clustered personnel)	3	3	9

* Denotes less than 1 percent

TABLE 6

RELATIVE PERCENT TIME SPENT ON DUTIES ACROSS DAFSC GROUPS

DUTIES	4Y031 (N=481)	4Y051 (N=619)	4Y071 (N=246)
A PERFORMING DENTAL SUPPLY ACTIVITIES	2	5	8
B MAINTAINING TREATMENT AREAS, EQUIPMENT, AND INSTRUMENTS	15	13	3
C PERFORMING DENTAL ASSISTANT ACTIVITIES	48	27	8
D PERFORMING PREVENTIVE DENTISTRY ACTIVITIES	13	14	3
E PERFORMING DENTAL RADIOGRAPHIC ACTIVITIES	12	11	4
F PERFORMING MEDICAL READINESS ACTIVITIES	6	2	3
G PERFORMING MANAGEMENT AND SUPERVISORY ACTIVITIES	1	12	42
H PERFORMING TRAINING ACTIVITIES	*	5	11
I PERFORMING GENERAL ADMINISTRATIVE ACTIVITIES	2	11	18

* Less than 1 percent

TABLE 7

REPRESENTATIVE TASKS PERFORMED BY DAFSC 4Y031 PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=481)
B60 Set up or break down DTRs	91
C123 Maintain DTR supply levels	88
C185 Seat patients	87
B44 Clean dental treatment room (DTR) supply storage areas	83
C112 Dismiss patients	83
C73 Assist with exams, screenings, or preliminary diagnostic procedures	82
C98 Chart dental diseases or treatments	80
C178 Retract patient cheeks, lips, or oral tissues	79
B63 Turn in instruments or hand pieces to dental instrument processing center (DIPC)	78
B41 Clean amalgam traps	78
C114 Drape patients, other than for surgical procedures	75
B59 Review expiration dates of dental instruments, packs, or materials	74
C64 Adjust dental chairs	73
I404 Schedule patients for appointments	72
B42 Clean dental equipment, other than X-ray units	72
C72 Assist with etching teeth	72
C139 Perform four-handed dentistry	72
C69 Assemble or disassemble aspirating or anesthetic syringes	72
B49 Flush oral evacuator systems	71
C187 Select and arrange instruments	71
B43 Clean dental instruments	71
C75 Assist with general dentistry procedures	71
C192 Take and record vital signs	71
E254 Mount and label dental radiographs	71
B48 Disinfect dental instruments	70

* Average Number of Tasks Performed - 107

TABLE 8

REPRESENTATIVE TASKS PERFORMED BY DAFSC 4Y051 PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=619)
I404 Schedule patients for appointments	66
B60 Set up or break down DTRs	64
B59 Review expiration dates of dental instruments, packs, or materials	63
C185 Seat patients	62
I386 File dental health records	61
C123 Maintain DTR supply levels	61
C112 Dismiss patients	60
B44 Clean dental treatment room (DTR) supply storage areas	58
B50 Inspect operating conditions of dental equipment	58
B63 Turn in instruments or hand pieces to dental instrument processing center (DIPC)	58
I389 Initiate dental health records	57
H366 Conduct on-the-job training (OJT)	56
C64 Adjust dental chairs	56
C98 Chart dental diseases or treatments	55
C179 Review patient records for follow-up treatment	55
C178 Retract patient cheeks, lips, or oral tissues	54
C73 Assist with exams, screenings, or preliminary diagnostic procedures	53
B42 Clean dental equipment, other than X-ray units	53
C180 Screen patient records for contraindications to treatment	53
C114 Drape patients, other than for surgical procedures	53
G320 Counsel subordinates concerning personal matters	52
B49 Flush oral evacuator systems	52
E254 Mount and label dental radiographs	52
B43 Clean dental instruments	51
I406 Verify patient eligibility for care	51

* Average Number of Tasks Performed - 92

TABLE 9

TASKS WHICH BEST DIFFERENTIATE BETWEEN DAFSC 4Y031 AND DAFSC 4Y051
(PERCENT MEMBERS PERFORMING)

TASKS	4Y031 (N=481)	4Y051 (N=619)	DIFFERENCE
C75 Assist with general dentistry procedures	71	30	41
C91 Assist with placing rubber dams	69	28	41
C167 Prepare rubber dams	65	25	40
C136 Mix temporary filling materials	65	26	40
C72 Assist with etching teeth	72	34	39
C166 Prepare rubber dam clamps	65	26	38
C92 Assist with placing temporary restorations	65	28	38
C71 Assist with endodontic procedures	60	22	38
G320 Counsel subordinates concerning personal matters	4	52	-48
G359 Write or endorse military performance reports	2	44	-43
H367 Counsel trainees on training progress	5	48	-43
H366 Conduct on-the-job training (OJT)	15	56	-41
G317 Conduct supervisory performance feedback sessions	4	45	-41
G360 Write recommendations for awards or decorations	3	42	-38
G344 Inspect personnel for compliance with military standards	10	45	-35
G337 Evaluate personnel for compliance with performance standards	6	41	-35

TABLE 10

REPRESENTATIVE TASKS PERFORMED BY DAFSC 4Y071 PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=246)
G320 Counsel subordinates concerning personal matters	88
G360 Write recommendations for awards or decorations	85
G344 Inspect personnel for compliance with military standards	83
G317 Conduct supervisory performance feedback sessions	80
G359 Write or endorse military performance reports	79
G337 Evaluate personnel for compliance with performance standards	76
G319 Conduct supervisory orientations for newly assigned personnel	75
G338 Evaluate personnel for promotion, demotion, reclassification, or special awards	73
G343 Initiate actions required due to substandard performance of personnel	71
G333 Establish performance standards for subordinates	70
G322 Determine or establish work assignments or priorities	68
G346 Interpret policies, directives, or procedures for subordinates	68
I401 Produce computer-generated documents, such as forms or correspondence	65
H366 Conduct on-the-job training (OJT)	64
H367 Counsel trainees on training progress	63
G314 Conduct general meetings, such as staff meetings, briefings, conferences, or workshops	61
H368 Determine training requirements	61
G350 Prepare for facility inspections	61
G340 Identify and implement dental clinic process improvements	60
G328 Develop or establish work schedules	59
G356 Write job or position descriptions	58
G315 Conduct self-inspections or self-assessments	58
G312 Assign personnel to work areas or duty positions, other than to medical readiness mobility positions	57
G327 Develop or establish work methods or procedures	57

* Average Number of Tasks Performed - 72

TABLE 11

TASKS WHICH BEST DIFFERENTIATE BETWEEN DAFSC 4Y051 AND DAFSC 4Y071
(PERCENT MEMBERS PERFORMING)

TASKS	4Y051 (N=619)	4Y071 (N=246)	DIFFERENCE
B60 Set up or break down DTRs	64	19	45
C185 Seat patients	62	18	44
C123 Maintain DTR supply levels	61	17	43
B44 Clean dental treatment room (DTR) supply storage areas	58	15	43
C112 Dismiss patients	60	19	41
B63 Turn in instruments or hand pieces to dental instrument processing center (DIPC)	58	19	39
B49 Flush oral evacuator systems	52	13	38
C98 Chart dental diseases or treatments	55	17	38
G322 Determine or establish work assignments or priorities	18	68	-51
G312 Assign personnel to work areas or duty positions, other than to medical readiness mobility positions	9	57	-48
G314 Conduct general meetings, such as staff meetings, briefings, conferences, or workshops	19	61	-43
G360 Write recommendations for awards or decorations	42	85	-43
G338 Evaluate personnel for promotion, demotion, reclassification, or special awards	29	73	-43
G328 Develop or establish work schedules	17	59	-41
G356 Write job or position descriptions	17	58	-41
G354 Schedule personnel for temporary duty (TDY) assignments, leaves, or passes	6	46	-40

TRAINING ANALYSIS

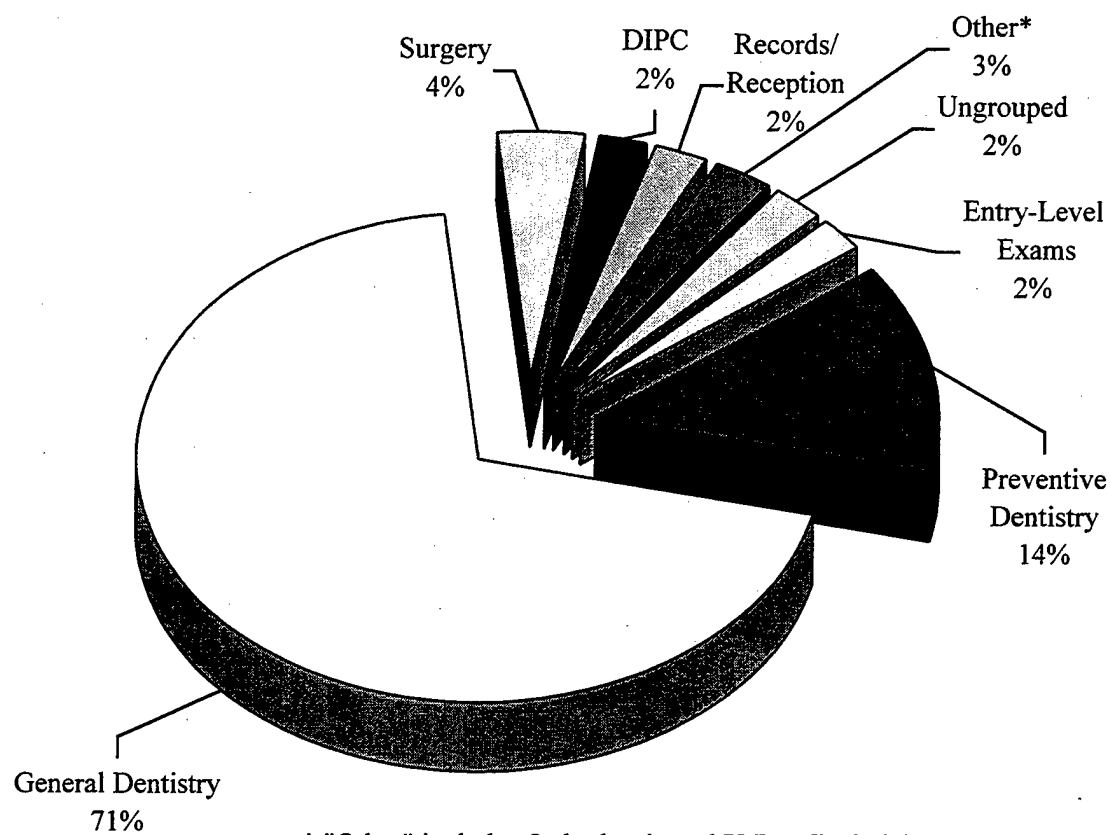
Occupational survey data are one of many sources of information which can be used to assist in the development of a training program relevant to the needs of personnel in their first enlistment. Factors which may be used in evaluating training include the overall description of the work being performed by first-enlistment personnel and their overall distribution across career ladder jobs, percentages of first-enlistment (1-48 months TAFMS) members performing specific tasks, as well as TE and TD ratings (previously explained in the **SURVEY METHODOLOGY** section).

First-Enlistment Personnel

In this study, there are 484 members in their first-enlistment (1-48 months TAFMS), representing 36 percent of the total survey sample. Figure 2 reflects the distribution of first-enlistment personnel within the career ladder. Most of their duty time is spent in technical jobs working on technical activities. Table 12 displays the relative percent of time spent on duties by first-enlistment personnel. Reviewing the table, first-enlistment personnel spend 89 percent of their time performing the technical tasks of Duties B-E.

Table 13 lists representative tasks performed by first-enlistment personnel. Nearly all of the tasks fall within the technical Duties B-E. To further illustrate the technical aspects of the first-enlistment members, Table 14 provides the equipment used by 25 percent or more of the personnel.

**DISTRIBUTION OF 4Y0X1 FIRST-ENLISTMENT PERSONNEL
ACROSS SPECIALTY JOBS
(N=484)**



* "Other" includes Orthodontic and X-Ray Technicians

FIGURE 2

TABLE 12
RELATIVE PERCENT TIME SPENT ON DUTIES BY
FIRST-ENLISTMENT PERSONNEL
(N=484)

DUTIES	PERCENT TIME SPENT
A PERFORMING DENTAL SUPPLY ACTIVITIES	2
B MAINTAINING TREATMENT AREAS, EQUIPMENT, AND INSTRUMENTS	16
C PERFORMING DENTAL ASSISTANT ACTIVITIES	48
D PERFORMING PREVENTIVE DENTISTRY ACTIVITIES	13
E PERFORMING DENTAL RADIOGRAPHIC ACTIVITIES	12
F PERFORMING MEDICAL READINESS ACTIVITIES	2
G PERFORMING MANAGEMENT AND SUPERVISORY ACTIVITIES	1
H PERFORMING TRAINING ACTIVITIES	*
I PERFORMING GENERAL ADMINISTRATIVE ACTIVITIES	5

* Denotes less than 1 percent performing

TABLE 13

REPRESENTATIVE TASKS PERFORMED BY AFSC 4Y0X1 PERSONNEL
IN THEIR FIRST ENLISTMENT

TASKS		PERCENT MEMBERS PERFORMING (N=484)
B60	Set up or break down DTRs	92
C123	Maintain DTR supply levels	88
C185	Seat patients	88
C73	Assist with exams, screenings, or preliminary diagnostic procedures	84
C112	Dismiss patients	83
B44	Clean dental treatment room (DTR) supply storage areas	83
C98	Chart dental diseases or treatments	82
C178	Retract patient cheeks, lips, or oral tissues	80
B41	Clean amalgam traps	79
B63	Turn in instruments or hand pieces to dental instrument processing center (DIPC)	77
C114	Drape patients, other than for surgical procedures	76
C72	Assist with etching teeth	75
B59	Review expiration dates of dental instruments, packs, or materials	74
B42	Clean dental equipment, other than X-ray units	74
C69	Assemble or disassemble aspirating or anesthetic syringes	74
C75	Assist with general dentistry procedures	73
C139	Perform four-handed dentistry	73
C187	Select and arrange instruments	73
C64	Adjust dental chairs	73
B43	Clean dental instruments	72
B48	Disinfect dental instruments	72
B49	Flush oral evacuator systems	72
E254	Mount and label dental radiographs	71
C91	Assist with placing rubber dams	71
I404	Schedule patients for appointments	70

* Average Number of Tasks Performed -108

TABLE 14

EQUIPMENT USED BY 25 PERCENT OR MORE
FIRST-ENLISTMENT AFSC 4Y0X1 PERSONNEL

EQUIPMENT	1ST ENL (N=484)
Blood Pressure Apparatus, Manual	81
Amalgamator	70
Radiographic Equipment, Panoramic	68
Blood Pressure Apparatus, Electronic	64
Dental Hand Instrument	61
Radiographic Processing Equipment, Automatic	60
Cavitron	58
Radiographic Equipment, Intra Oral	54
Suction Apparatus	52
Dental Hand Piece, Low-Speed Air	50
Lightcure System	50
Ultrasonic Instrument Cleaner	50
Radiographic Equipment, Duplicating	48
Dental Operating Unit	46
Instrument Washer/Disinfector	46
Printer, Computer	45
Office Copying Equipment	44
Radiographic Processing Equipment, Manual	43
Personal Computer (PC)	42
Sterilizer, Steam	41
Pulp Tester	40
Central Evacuation System	39
Oxygen Equipment	39
Dental Hand Piece, High-Speed Fiber-Optic	38
Demonstration Teeth Set	36
Automatic Hand Piece Cleaner and Lubricator	35
ProphyJet	32
Alginate	31
Dental Hand Piece, High-Speed (Not Fiber-Optic)	31
Radiographic Equipment, Mobile	31
Sonic Scaler	31
Water Distiller	31
Light, Operating	30
Light, Fiber-Optic	29
Thermometer, Electronic (Oral)	29
Alcohol Torch	28
Spore Test Incubator	27
Cavijets	26
Mechanical Spatula, such as Whip Mix	26
Dental Hand Piece, Low-Speed Electric	25

Training Emphasis (TE) and Task Difficulty (TD) Data

TE and TD data are secondary factors that can assist technical school personnel in deciding which tasks should be emphasized in entry-level training. These ratings are based on the judgments of senior career ladder NCOs working at operational units in the field. They are collected to provide training personnel with a rank-ordering of those tasks in the JI considered important for first-enlistment personnel training, along with a measure of the difficulty of the JI tasks. When combined with data on the percentages of first-enlistment personnel performing tasks, comparisons can then be made to determine if training adjustments are necessary. For example, tasks receiving high ratings on both task factors, accompanied by moderate to high percentages performing, may warrant resident training. Those tasks receiving high task factor ratings, but low percentages performing, may be more appropriately planned for OJT programs within the career ladder. Low task factor ratings may highlight tasks best omitted from training for first-enlistment personnel, but this decision must be weighed against percentages of personnel performing the tasks, command concerns, and criticality of the tasks.

To assist technical school personnel, AFOMS has developed a computer program that incorporates these secondary factors and the percentage of first-enlistment personnel performing each task to produce an Automated Training Indicator (ATI) for each task. These indicators correspond to training decisions listed and defined in the Training Decision Logic Table found in Attachment 2, AETCI 36-2601, and allows course personnel to quickly focus their attention on those tasks which are most likely to qualify for initial resident course consideration.

Table 15 presents tasks with the highest TE ratings for AFSC 4Y0X1 first-enlistment airmen, while Table 16 displays those tasks AFSC 4Y0X1 raters judged to be most difficult to learn. For example, TE raters (refer to Table 15) reported that tasks such as setting up or breaking down dental treatment rooms require a high degree of training emphasis and, from the data, most airmen in their first job and within their first enlistment are performing these tasks. However, it is a relatively easy task to learn according to senior NCOs. Table 16 shows TD raters reported assisting with forensic identifications to be among the most difficult tasks to learn. However, due to the low numbers of individuals performing these types of tasks, they would be inappropriate for inclusion in a resident curriculum and are more appropriately taught as OJT items.

Various lists of tasks, accompanied by TE and TD ratings, and where appropriate, ATI information, are contained in the TRAINING EXTRACT package and should be reviewed in detail by training school personnel. (For a more detailed explanation of TE and TD ratings, see Task Factor Administration in the **SURVEY METHODOLOGY** section of this report.)

TABLE 15

TASKS RATED HIGHEST IN TRAINING EMPHASIS

TASKS	PERCENT MEMBERS PERFORMING				TNG EMP*	TASK DIFF**
	IST (N=181)	JOB (N=181)	IST ENL (N=484)			
B60 Set up or break down DTRs	94	92	3.97			
B61 Sterilize dental instruments	62	61	3.80			
C67 Administer or practice cardiopulmonary resuscitation (CPR)	37	41	5.59			
C139 Perform four-handed dentistry	83	73	4.61			
B59 Review expiration dates of dental instruments, packs, or materials	76	74	2.60			
C140 Perform hypertension screenings	44	54	4.00			
B62 Sterilize dental supplies, such as cotton rolls or gauze	54	50	3.33			
I 406 Verify patient eligibility for care	50	52	3.92			
B54 Prepare kits, packs, and trays for sterilization	70	67	4.26			
C75 Assist with general dentistry procedures	85	73	4.99			
B48 Disinfect dental instruments	76	72	2.94			
C138 Observe patients for adverse reactions during treatment	69	69	4.41			
B52 Lubricate hand pieces	69	65	3.81			
C98 Chart dental diseases or treatments	86	82	5.08			
E262 Shield patients from radiation	73	69	3.53			
I 404 Schedule patients for appointments	71	70	4.12			
C126 Manage syncope	12	16	5.40			
B43 Clean dental instruments	74	72	2.92			
C68 Aspirate and irrigate oral cavities	57	65	3.60			
C178 Retract patient cheeks, lips, or oral tissues	82	80	3.49			
E232 Adjust X-Ray unit controls, such as kilovoltage peak (kVP), milliamperage (mA), or time	59	59	5.22			
B44 Clean dental treatment room (DTR) supply storage areas	83	83	2.88			
C123 Maintain DTR supply levels	91	88	3.76			
C69 Assemble or disassemble aspirating or anesthetic syringes	77	74	3.39			

* Mean TE Rating is 3.56, and Standard Deviation is 2.33 (High TE = 5.89)

** Average TD Rating is 5.00

TABLE 16

TASKS RATED HIGHEST IN TASK DIFFICULTY

TASKS	TASK DIFF	PERCENT MEMBERS PERFORMING						TNG EMP
		1ST JOB (N=181)	1ST ENL (N=484)	3-SKL LVL (N=193)	5-SKL LVL (N=996)	7-SKL LVL (N=608)		
C78	7.57	35	31	30	13	4	3.34	
G330	6.90	1	1	1	0	9	.46	
D231	6.86	4	7	7	9	10	1.34	
G332	6.81	1	1	1	12	46	.49	
G316	6.80	1	2	2	4	26	.34	
H369	6.77	0	0	0	5	9	.40	
C74	6.72	9	10	11	11	7	2.74	
G331	6.71	1	1	1	5	31	.60	
G329	6.66	1	1	1	6	31	.74	
D221	6.66	6	14	13	23	7	2.49	
F265	6.65	8	11	11	11	3	2.51	
D222	6.65	16	34	34	41	11	4.26	
F303	6.65	4	4	5	1	1	.80	
F266	6.64	12	11	11	7	4	2.14	
H370	6.60	1	1	2	20	35	.69	
G349	6.56	1	0	0	2	18	.20	
H371	6.53	0	1	2	11	20	.69	
D223	6.49	10	25	24	27	7	2.31	
F301	6.46	17	16	15	8	6	2.23	
F267	6.45	12	13	14	11	7	2.31	
F307	6.43	4	4	4	1	2	1.51	
G358	6.43	1	0	0	1	27	.20	

* Mean TE Rating is 3.56, and Standard Deviation is 2.33 (High TE = 5.89)

** Average TD Rating is 5.00

Specialty Training Standard (STS)

A comprehensive review of STS 4Y0X1, dated May 1997, compared STS items to survey data. STS elements containing general knowledge information, mandatory entries, subject-matter-knowledge-only requirements, or basic supervisory responsibilities were not examined, unless desired by SMEs. Task knowledge and performance elements of the STS were compared against the standard set forth in AETCI 36-2601 and AFI 36-2623. Typically, STS sections and subsections matched to tasks which have sufficiently high TE ratings, and are performed by at least 20 percent of the personnel in skill-level groups such as first-enlistment (1-48 months TAFMS), are considered to be supported and should be considered for inclusion in the STS. Likewise, paragraphs having tasks with less than 20 percent performing across all of the criterion groups should be considered for deletion from the STS.

To assist specifically in evaluation of the STS, technical school personnel from 381 TRS/XWAA matched tasks to appropriate sections and subsections of the Dental Assistant STS 4Y0X1, dated May 1997. The matching was a way to validate the STS contained the proper information. A complete computer listing displaying the percent members performing tasks and TE ratings for each task, along with the STS matching, has been forwarded to the technical school for the use in further detailed reviews of appropriate training documents. A summary of this information is presented below.

Overall, the STS provides comprehensive coverage of the work performed by personnel in this career ladder, with survey data supporting nearly all of the essential elements. Those elements not supported are listed in Table 17. Several elements with no performance coding (either dashed or knowledge coded) have high percentages of personnel performing matched tasks and should be reviewed by training personnel for possible inclusion in the basic course. Some examples are shown in Table 18.

Tasks not referenced to any element of the STS are listed at the end of the STS computer listing. These tasks were reviewed to determine if there were any tasks concentrated around any particular function or job. Survey results and discussions with technical school personnel reflect no need for these unmatched tasks to be referenced in the STS.

Plan of Instruction (POI)

A comprehensive review of the POI J3ABR4Y031-003, dated September 1998, compared survey data to POI items. POI paragraphs containing general knowledge information and written test requirements were not compared, unless desired by training school personnel. Elements with performance objectives were compared against the standard set forth in AETCI 36-2601, paragraph 2.5. Typically, POI items matched to tasks which have sufficiently high TE ratings, and are performed by at least 30 percent of personnel in skill-level groups such as first-job (1-24 months TAFMS) and first-enlistment (1-48 months TAFMS), are considered to be supported and should be considered for inclusion in the POI. Likewise, paragraphs having tasks with less than 30 percent performing across the criterion groups should be considered for deletion.

Similar to the STS match, technical school personnel were asked to match performance-coded items in the POI to the tasks of the JI. A complete computer listing displaying the percent members performing tasks and TE and TD ratings for each task, along with the POI matching, has been forwarded to the technical school for use in further detailed reviews of appropriate training documents. A summary of this information is presented here.

Every performance-coded learning objective in the POI was matched successfully to at least one task from the JI. Survey results supported the elements in the POI. However, there were a number of tasks in the job inventory which were not matched to the POI that warrant discussion by training personnel. These tasks have high TE and TD ratings, coupled with high percent members performing in the first enlistment and first job. A complete listing of the unmatched tasks is attached to the back of the POI supplement given to the technical school while a few of the representative tasks are presented in Table 19.

TABLE 17

STS 4Y0X1 PERFORMANCE-CODED ELEMENTS
NOT SUPPORTED BY OCCUPATIONAL SURVEY DATA
(PERCENT MEMBERS PERFORMING)

TASKS			PERCENT MEMBERS PERFORMING					TASK DIFF	ATI	
			3-SKL			TNG	1ST			
			LVL (N=481)	JOB (N=181)	ENL (N=484)					
							EMP			
4o(1)	Develop documents using computers such as forms and correspondence	1a - -								
I 401	Produce computer-generated documents, such as forms or correspondence		8	4	7	2.26	4.96	2		
4o(2)	Use medical information management Systems	1a - -								
G345	Interpret automated dental treatment data		2	2	2	.80	5.78	2		
I398	Perform medical information management systems procedures		1	1	1	1.06	5.49	2		

* Mean TE Rating is 3.56, and Standard Deviation is 2.33 (High TE = 5.89)

** Average TD Rating is 5.00

TABLE 18

**EXAMPLES OF TECHNICAL TASKS PERFORMED BY AFSC 4Y0X1 GROUP MEMBERS
SUGGESTED FOR PROFICIENCY CODE REVIEW TO PERFORMANCE CODING
(PERCENT MEMBERS PERFORMING)**

TASKS		PERCENT MEMBERS PERFORMING						TNG EMP	3-SKL			1ST		TASK DIFF	ATI
		LVL (N=481)	JOB (N=181)	ENL (N=484)	1ST										
1a	Medical Readiness														
F292	Load or unload patients on patient transportation vehicles						5.51	34	33	33			5.10	15	
F299	Perform patient carries using hand or litter method						4.86	32	31	31			5.30	15	
F310	Transfer litter patients						4.86	32	30	31			5.36	15	
4a(3)(a)	Assist with requests for medical Service consultations			-	c	-									
C93	Assist with request for medical service consultations						4.89	43	42	42			4.34	15	
7c(6)(a)	Assist with intravenous sedations					-									
C77	Assist with IV sedations					a	4.86	43	43	45			6.32	15	
C161	Prepare IV materials						5.03	36	37	38			4.98	15	
8f(2)	Assist with examination, screening, and Preliminary diagnosis					b									
C73	Assist with exams, screenings, or preliminary diagnostic procedures						6.69	82	90	84			4.66	18	

* Mean TE Rating is 3.56, and Standard Deviation is 2.33 (High TE = 5.89)

** Average TD Rating is 5.00

TABLE 19

EXAMPLES OF TASKS NOT MATCHED TO THE
POI J3ABR4Y031-003, DENTAL ASSISTANT APPRENTICE COURSE

TASKS	TNG EMP*	PERCENT MEMBERS PERFORMING		TASK DIFF**	ATI
		1ST JOB (N=181)	1ST ENL (N=484)		
C73 Assist with exams, screenings, or preliminary diagnostic procedures	6.69	90	84	4.66	18
C92 Assist with placing temporary restorations	6.63	77	68	4.38	18
D200 Assemble or disassemble prophylaxis hand pieces	5.91	48	62	4.04	18
E244 Expose panoramic radiographs	6.63	63	62	5.56	18
E257 Place radiographic film in cassettes	6.17	50	52	4.22	18
C71 Assist with endodontic procedures	5.66	72	63	5.46	17
C82 Assist with prosthodontic procedures	5.51	64	57	5.70	17
C89 Assist with placing medication in root canals	5.54	59	53	4.40	17
C115 Etch teeth	5.06	59	59	4.32	17
D198 Apply pit and fissure sealants	5.17	43	50	5.17	17
D217 Polish teeth with rubber cups	5.49	27	50	4.53	17
E237 Duplicate radiographs	5.77	46	50	4.48	17
C77 Assist with IV sedations	4.86	43	45	6.32	15
C79 Assist with orthodontic procedures	3.69	32	31	5.85	15
C81 Assist with periodontic procedures	4.89	49	44	5.79	15
C90 Assist with placing periodontal dressings	4.14	33	32	4.66	15
C93 Assist with requests for medical service consultations	4.89	42	42	4.34	15
C101 Collect biohazardous materials for disposal, other than sharps	5.83	35	35	4.35	15
C104 Coordinate cases with dental lab	5.00	34	39	4.11	15
C141 Place amalgam	4.60	36	34	4.25	15
C161 Prepare IV materials	5.03	37	38	4.98	15

* Mean TE Rating is 3.56, and Standard Deviation is 2.33 (High TE = 5.89)

** Average TD Rating is 5.00

JOB SATISFACTION ANALYSIS

An examination of the job satisfaction indicators of various groups can give career ladder managers a better understanding of some of the factors which may affect the job performance of airmen in the career ladder. Attitude questions covering job interest, perceived utilization of talents and training, sense of accomplishment from work, and reenlistment intentions were included in the survey to provide indications of job satisfaction.

Table 20 presents job satisfaction data for AFSC 4Y0X1 TAFMS groups, together with TAFMS data for a comparative sample of Medical career ladders surveyed in 1997. The first-enlistment airmen rated nearly the same as the comparable sample in all areas of job satisfaction. Second-enlistment and career personnel, however, show noticeably less job interest. Perhaps the worst figure is the reenlistment intention for second-enlistment airmen; 47 percent plan on not reenlisting. First-enlistment and career intentions for reenlistment, while not meeting the Air Force goals of 55 percent and 95 percent retention, respectively, are similar to their comparative samples.

Table 21 presents job satisfaction data for the specialty jobs found in the Dental Assistant career ladder. Areas of concern include the Entry-Level Exams Job, of which only 54 percent of the incumbents considered the job interesting and 54 percent said they did not intend to reenlist. Personnel in the Orthodontics Job also plan on not reenlisting at a figure of 53 percent. Airmen working the DIPC Job appear to be least satisfied in the career field. Their answers in the survey placed them last in nearly every job satisfaction question. Forty-four percent of the airmen in the job claimed their job was so-so or dull, 41 percent and 28 percent said they utilized their talents and training, respectively, little or not at all. They claimed the lowest sense of accomplishment, only 44 percent were satisfied and 33 percent were dissatisfied. Only 47 percent plan on reenlisting at their next opportunity. Low reenlistment intentions among a relatively experienced group of personnel creates a potential problem in the future of the career ladder.

White Uniform Response

Personnel in the survey were asked how often they wear white uniforms to perform duties. Fifty-three percent of the respondents say they never wear whites. There is a population, across skill-levels, TAFMS, and specialty job groupings, however, that wears the white uniform much of the time. Sixty-two percent of 3-skill level personnel, 48 percent of 5-skill level airmen, and 24 percent of 7-skill level personnel wear the whites at least once a week. Nineteen percent of 3-skill level personnel, 15 percent of 5-skill level personnel, and 8 percent of 7-skill level personnel wear the whites 5 times a week. Table 22 shows the basic results.

Personnel also responded frequently with write-in comments in regards to this question in the survey. The typical response related their inability to find replacement whites when their issued ones become worn. Personnel who were compelled to write-in comments (a great minority of the survey respondents) liked to wear the white uniform. There were no negative write-in comments on the issue of the white uniform.

TABLE 20

COMPARISON OF JOB SATISFACTION INDICATORS BY TAFMS GROUPS
(PERCENT MEMBERS PERFORMING)

	1-48 MOS TAFMS		49-96 MOS TAFMS		97+ MOS TAFMS	
	1998 4Y0X1 (N=484)	COMP SAMPLE* (N=711)	1998 4Y0X1 (N=187)	COMP SAMPLE* (N=446)	1998 4Y0X1 (N=676)	COMP SAMPLE* (N=1018)
<u>EXPRESSED JOB INTEREST:</u>						
INTERESTING	74	70	67	76	71	81
SO-SO	16	18	19	15	19	13
DULL	10	12	14	9	10	6
<u>PERCEIVED UTILIZATION OF TALENTS:</u>						
FAIRLY WELL TO PERFECTLY LITTLE OR NOT AT ALL	83 17	78 22	84 16	85 15	84 16	88 12
<u>PERCEIVED UTILIZATION OF TRAINING:</u>						
FAIRLY WELL TO PERFECTLY LITTLE OR NOT AT ALL	94 6	93 7	95 5	92 8	90 10	89 11
<u>SENSE OF ACCOMPLISHMENT GAINED FROM WORK:</u>						
SATISFIED	74	70	70	75	71	78
NEUTRAL	11	14	19	14	11	8
DISSATISFIED	15	16	11	11	18	14
<u>REENLISTMENT INTENTIONS:</u>						
YES, OR PROBABLY YES	47	51	53	64	68	71
NO, OR PROBABLY NO	53	49	47	36	13	10
PLAN TO RETIRE	0	0	0	0	19	19

* Comparative sample of Medical career ladders surveyed in 1997 include the 4A1X1, 4E0X1, and 4R0X1 AFSCs

TABLE 21

COMPARISON OF JOB SATISFACTION INDICATORS BY SPECIALTY JOBS
(PERCENT MEMBERS PERFORMING)

	DENTAL GENERALIST CLUSTER (ST024) (N=849)	ENTRY-LVL EXAMS JOB (ST047) (N=13)	PREVENTIVE DENTISTRY JOB (ST058) (N=234)	GENERAL DENTISTRY JOB (ST082) (N=504)	SURGERY JOB (ST112) (N=71)	ORTHO- DONTICS JOB (ST093) (N=15)
<u>EXPRESSED JOB INTEREST:</u>						
INTERESTING	73	54	72	71	92	87
SO-SO	17	38	16	17	8	13
DULL	10	8	12	12	0	0
<u>PERCEIVED UTILIZATION OF TALENTS:</u>						
FAIRLY WELL TO PERFECTLY LITTLE OR NOT AT ALL	84 16	69 31	86 14	83 17	96 4	93 7
<u>PERCEIVED UTILIZATION OF TRAINING:</u>						
FAIRLY WELL TO PERFECTLY LITTLE OR NOT AT ALL	94 6	100 0	93 7	94 6	94 6	93 7
<u>SENSE OF ACCOMPLISHMENT GAINED FROM WORK:</u>						
SATISFIED	73	69	74	71	84	93
NEUTRAL	12	23	11	14	8	0
DISSATISFIED	15	8	15	15	8	7
<u>REENLISTMENT INTENTIONS:</u>						
YES, OR PROBABLY YES	55	46	61	52	63	47
NO, OR PROBABLY NO	41	54	34	46	32	53
WILL RETIRE	4	0	5	2	5	0

TABLE 21 (CONTINUED)

COMPARISON OF JOB SATISFACTION INDICATORS BY SPECIALTY JOBS
(PERCENT MEMBERS PERFORMING)

	X-RAY TECHNICIAN JOB (ST072) (N=61)	DIPC JOB (ST057) (N=43)	RECORDS/ RECEPTION JOB (ST055) (N=130)	SUPERVISOR JOB (ST046) (N=144)	SUPPLY JOB (ST173) (N=70)
EXPRESSED JOB INTEREST:					
INTERESTING	67	56	70	72	74
SO-SO	20	23	20	19	17
DULL	13	21	10	9	9
PERCEIVED UTILIZATION OF TALENTS:					
FAIRLY WELL TO PERFECTLY LITTLE OR NOT AT ALL	77 23	59 41	88 12	87 13	89 11
PERCEIVED UTILIZATION OF TRAINING:					
FAIRLY WELL TO PERFECTLY LITTLE OR NOT AT ALL	96 4	72 28	94 6	92 8	89 11
SENSE OF ACCOMPLISHMENT GAINED FROM WORK:					
SATISFIED	68	44	66	80	76
NEUTRAL	16	23	18	5	10
DISSATISFIED	16	33	15	15	14
REENLISTMENT INTENTIONS:					
YES, OR PROBABLY YES	72	47	72	56	76
NO, OR PROBABLY NO	16	44	14	9	10
WILL RETIRE	12	9	14	35	14

TABLE 22

AFSC 4Y0X1 PERSONNEL DUTY WEAR
OF THE MEDICAL WHITE UNIFORM

	1-48 MOS (N=484)	49-96 MOS (N=187)	97+ MOS (N=676)	4Y031 (N=481)	4Y051 (N=619)	4Y071 (N=246)	CONUS 4Y051 (N=429)	OVERSEAS 4Y051 (N=190)
NEVER	38	47	62	39	53	77	46	65
ONCE A WEEK	9	7	5	10	5	4	5	5
TWICE A WEEK	5	4	3	4	3	2	3	4
3 TIMES A WEEK	6	7	6	6	7	5	7	7
4 TIMES A WEEK	22	22	11	22	17	4	20	12
5 TIMES A WEEK	20	13	13	19	15	8	19	7

IMPLICATIONS

This survey was initiated to provide current job and task data for use in evaluating the AFMAN 36-2108 *Specialty Description* and appropriate training documents.

Survey results indicate that the present classification structure, as described in the latest specialty description, accurately portrays the jobs performed in the career ladder. Career ladder training documents appear, on the whole, to be well supported by survey data, but require further review to ensure appropriate proficiency coding. The career ladder progression follows a typical pattern of highly technical 3-skill level jobs transitioning to highly supervisory 7-skill level jobs.

Job satisfaction is fairly high for first-enlistment personnel and declines, compared to other medical career fields, with time in service. This career ladder has lower than desired reenlistment intentions for all first-enlistment, second-enlistment and career groups. Additionally, personnel in the DIPC Job are clearly the least satisfied in the career field. About 47 percent of the personnel surveyed claim that they wear their white uniform at least once a week.

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APPENDIX A

SELECTED REPRESENTATIVE TASKS PERFORMED BY SPECIALTY JOB GROUPS

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TABLE A1

DENTAL GENERALIST CLUSTER
(IN ORDER OF PERCENT MEMBERS PERFORMING)

TASKS	PERCENT MEMBERS PERFORMING (N=849)
B60 Set up or break down DTRs	97
C123 Maintain DTR supply levels	95
C185 Seat patients	92
C112 Dismiss patients	90
B44 Clean dental treatment room (DTR) supply storage areas	88
C178 Retract patient cheeks, lips, or oral tissues	85
C73 Assist with exams, screenings, or preliminary diagnostic procedures	85
C98 Chart dental diseases or treatments	85
C114 Drape patients, other than for surgical procedures	82
B63 Turn in instruments or hand pieces to dental instrument processing center (DIPC)	82
B49 Flush oral evacuator systems	80
C64 Adjust dental chairs	80
B59 Review expiration dates of dental instruments, packs, or materials	79
B42 Clean dental equipment, other than X-ray units	78
C187 Select and arrange instruments	76
C179 Review patient records for follow-up treatment	76
I404 Schedule patients for appointments	75
C192 Take and record vital signs	75
C68 Aspirate and irrigate oral cavities	73
D203 Brief patients on home care of teeth or prostheses	72
C138 Observe patients for adverse reactions during treatment	72
B48 Disinfect dental instruments	72
D202 Brief patients on hazards of tobacco use on oral health conditions	70
D201 Brief patients on formation of plaque and relationship to dental disease	69
C139 Perform four-handed dentistry	69
D213 Identify presence of calculus on diagnostic radiographs	65
D211 Evaluate patient oral hygiene techniques	64

TABLE A2

ENTRY-LEVEL EXAMS JOB
(IN ORDER OF PERCENT MEMBERS PERFORMING)

TASKS	PERCENT MEMBERS PERFORMING (N=13)
C75 Assist with general dentistry procedures	92
B60 Set up or break down DTRs	92
C73 Assist with exams, screenings, or preliminary diagnostic procedures	92
C139 Perform four-handed dentistry	85
C92 Assist with placing temporary restorations	85
C98 Chart dental diseases or treatments	85
C91 Assist with placing rubber dams	85
B63 Turn in instruments or hand pieces to dental instrument processing center (DIPC)	77
C123 Maintain DTR supply levels	77
C166 Prepare rubber dam clamps	77
C84 Assist with placing amalgam	77
C167 Prepare rubber dams	69
C136 Mix temporary filling materials	69
C130 Mix dental cements	69
B41 Clean amalgam traps	69
C170 Prepare topical anesthetics or medications	62
C133 Mix impression materials	62
C69 Assemble or disassemble aspirating or anesthetic syringes	62
C72 Assist with etching teeth	62
C64 Adjust dental chairs	62
C185 Seat patients	54
C129 Mix composite resins	54
C128 Mix bases	54
C135 Mix silver alloys	46
C114 Drape patients, other than for surgical procedures	46
C102 Collect sharps for disposal	46
B44 Clean dental treatment room (DTR) supply storage areas	46
C112 Dismiss patients	38
I386 File dental health records	38
I404 Schedule patients for appointments	38

TABLE A3

PREVENTIVE DENTISTRY JOB
(IN ORDER OF PERCENT MEMBERS PERFORMING)

TASKS	PERCENT MEMBERS PERFORMING (N=234)
D213 Identify presence of calculus on diagnostic radiographs	96
B60 Set up or break down DTRs	96
D201 Brief patients on formation of plaque and relationship to dental disease	95
D211 Evaluate patient oral hygiene techniques	95
D226 Remove supragingival calculus from teeth using periodontal hand instruments	94
D228 Remove supragingival calculus from teeth using ultrasonic scaling units	93
D202 Brief patients on hazards of tobacco use on oral health conditions	93
D229 Sharpen periodontal scaling instruments	93
D203 Brief patients on home care of teeth or prostheses	92
D200 Assemble or disassemble prophylaxis hand pieces	91
D222 Remove subgingival calculus from teeth using periodontal hand instruments	90
D217 Polish teeth with rubber cups	90
D224 Remove subgingival calculus from teeth using ultrasonic scaling units	89
D199 Apply topical fluorides	89
C123 Maintain DTR supply levels	89
D220 Remove external stains from teeth using polishing units, such as ProphyJets	88
D204 Brief patients on effects of diet and nutrition on dental health	88
D212 Identify abnormal oral conditions	87
D210 Evaluate patient oral conditions for contraindications to prophylaxis	83
C185 Seat patients	83
C112 Dismiss patients	83
B44 Clean dental treatment room (DTR) supply storage areas	80
D227 Remove supragingival calculus from teeth using sonic scaling units	63

TABLE A4

GENERAL DENTISTRY JOB
(IN ORDER OF PERCENT MEMBERS PERFORMING)

TASKS		PERCENT MEMBERS PERFORMING (N=504)
B60	Set up or break down DTRs	99
C123	Maintain DTR supply levels	98
C139	Perform four-handed dentistry	96
C185	Seat patients	96
C112	Dismiss patients	94
C178	Retract patient cheeks, lips, or oral tissues	94
C73	Assist with exams, screenings, or preliminary diagnostic procedures	94
C98	Chart dental diseases or treatments	94
C69	Assemble or disassemble aspirating or anesthetic syringes	93
B41	Clean amalgam traps	93
C75	Assist with general dentistry procedures	92
B44	Clean dental treatment room (DTR) supply storage areas	92
C91	Assist with placing rubber dams	91
C114	Drape patients, other than for surgical procedures	90
C170	Prepare topical anesthetics or medications	90
C121	Insert or remove burs in hand pieces	90
B42	Clean dental equipment, other than X-ray units	88
C92	Assist with placing temporary restorations	88
C133	Mix impression materials	88
C166	Prepare rubber dam clamps	87
C167	Prepare rubber dams	87
C84	Assist with placing amalgam	86
B63	Turn in instruments or hand pieces to dental instrument processing center (DIPC)	86
B43	Clean dental instruments	86
B49	Flush oral evacuator systems	86
C187	Select and arrange instruments	84
C138	Observe patients for adverse reactions during treatment	84
B48	Disinfect dental instruments	83
I404	Schedule patients for appointments	81
C68	Aspirate and irrigate oral cavities	80

TABLE A5

SURGERY JOB
(IN ORDER OF PERCENT MEMBERS PERFORMING)

TASKS	PERCENT MEMBERS PERFORMING (N=71)	
C185	Seat patients	100
C113	Drape patients for surgical procedures in DTR	100
C69	Assemble or disassemble aspirating or anesthetic syringes	100
C68	Aspirate and irrigate oral cavities	99
C178	Retract patient cheeks, lips, or oral tissues	97
C112	Dismiss patients	97
C123	Maintain DTR supply levels	97
B60	Set up or break down DTRs	96
C77	Assist with IV sedations	92
C187	Select and arrange instruments	92
C182	Scrub for surgical procedures in DTR	92
C192	Take and record vital signs	90
C109	Cut sutures	90
C70	Assist with clinical oral surgery procedures	89
C179	Review patient records for follow-up treatment	89
B44	Clean dental treatment room (DTR) supply storage areas	89
C169	Prepare suturing materials	87
C161	Prepare IV materials	86
C138	Observe patients for adverse reactions during treatment	86
C170	Prepare topical anesthetics or medications	86
C66	Adjust oxygen flow on oxygen equipment	86
C121	Insert or remove burs in hand pieces	85
C102	Collect sharps for disposal	85
I404	Schedule patients for appointments	82
C95	Brief patients on postoperative instructions	82
B63	Turn in instruments or hand pieces to dental instrument processing center (DIPC)	80
C83	Assist with suture placement, other than cutting sutures	75
C114	Drape patients, other than for surgical procedures	73
C78	Assist with operating room (OR) oral surgery procedures	62

TABLE A6

ORTHODONTIC JOB
(IN ORDER OF PERCENT MEMBERS PERFORMING)

TASKS	PERCENT MEMBERS PERFORMING (N=15)
B60 Set up or break down DTRs	100
C123 Maintain DTR supply levels	100
C115 Etch teeth	100
C156 Prepare brackets for bonding	93
C112 Dismiss patients	93
C185 Seat patients	93
C187 Select and arrange instruments	93
C133 Mix impression materials	93
C72 Assist with etching teeth	93
C79 Assist with orthodontic procedures	87
C186 Secure archwires with ligatures or elastics	87
C125 Make preliminary alginate impressions	87
C184 Seat orthodontic bands	87
C179 Review patient records for follow-up treatment	87
C151 Place or remove separators	87
D203 Brief patients on home care of teeth or prostheses	87
C139 Perform four-handed dentistry	87
B44 Clean dental treatment room (DTR) supply storage areas	87
C130 Mix dental cements	87
B63 Turn in instruments or hand pieces to dental instrument processing center (DIPC)	87
C64 Adjust dental chairs	87
C86 Assist with placing brackets on teeth	80
C114 Drape patients, other than for surgical procedures	80
C108 Cut orthodontic wires	80
C110 Demonstrate care and wear of orthodontic appliances	80
C155 Prepare bands for cementing	80
C143 Place brackets on teeth	80
C173 Remove orthodontic appliances, such as bands, brackets, or wires	80
C96 Cement bands	80
C178 Retract patient cheeks, lips, or oral tissues	80
C104 Coordinate cases with dental lab	80
I404 Schedule patients for appointments	73

TABLE A7

X-RAY TECHNICIAN JOB
(IN ORDER OF PERCENT MEMBERS PERFORMING)

TASKS	PERCENT MEMBERS PERFORMING (N=61)
E234 Develop radiographic film using automatic developing processor	100
E262 Shield patients from radiation	100
E251 Inspect quality of diagnostic radiographs	100
E259 Prepare patients for radiographs, such as removing jewelry	100
E232 Adjust X-ray unit controls, such as kilovoltage peak (kVP), milliamperage (mA), or time	100
E249 Identify anatomical landmarks on dental radiographs	100
E257 Place radiographic film in cassettes	100
E254 Mount and label dental radiographs	98
E244 Expose panoramic radiographs	98
E248 Identify causes of faulty radiographs	98
E250 Inspect lead aprons for serviceability	98
E237 Duplicate radiographs	98
E247 Expose vertical bitewing radiographs	97
E258 Place or remove infection control barriers on X-ray equipment and surfaces	97
E239 Expose apical radiographs using paralleling technique	97
E236 Disinfect X-ray units and chairs	97
E263 Shield providers from radiation	97
E238 Expose apical radiographs using bisecting angle technique	93
E233 Change radiographic film developing or fixing solutions	93
E243 Expose occlusal radiographs	93
E245 Expose standard (horizontal) bitewing radiographs	92
E264 Sterilize extension cone paralleling (XCP) instruments	92
E252 Load fixing solutions	92
E256 Perform user maintenance on automatic film processors	90
E255 Perform film analyzer tests	90
E260 Recover radiographic silver	85
E242 Expose endodontic file length radiographs	80
E240 Expose cephalometric radiographs	67

TABLE A8
DIPC JOB
(IN ORDER OF PERCENT MEMBERS PERFORMING)

TASKS	PERCENT MEMBERS PERFORMING (N=43)
B61 Sterilize dental instruments	100
B54 Prepare kits, packs, and trays for sterilization	98
B53 Perform sterilization testing procedures	95
B48 Disinfect dental instruments	93
B62 Sterilize dental supplies, such as cotton rolls or gauze	88
B52 Lubricate hand pieces	86
B47 Clean sterilizers	86
B43 Clean dental instruments	77
B59 Review expiration dates of dental instruments, packs, or materials	70
B46 Clean sterile instrument storage areas	70
B58 Report defective equipment or utilities to dental logistics	53
B45 Clean nonsterile instrument storage areas	49
H366 Conduct on-the-job training (OJT)	47
B50 Inspect operating conditions of dental equipment	42
B63 Turn in instruments or hand pieces to dental instrument processing center (DIPC)	40
B42 Clean dental equipment, other than X-ray units	40
G359 Write or endorse military performance reports	40
G337 Evaluate personnel for compliance with performance standards	40
E264 Sterilize extension cone paralleling (XCP) instruments	37
B51 Lubricate dental equipment, other than hand pieces	37
A19 Perform linen supply activities, such as collecting or distributing lab coats, towels, or wraps	37
G320 Counsel subordinates concerning personal matters	37
H367 Counsel trainees on training progress	35
G344 Inspect personnel for compliance with military standards	35
A17 Order dental supplies	33

TABLE A9
RECORDS/ RECEPTION JOB
(IN ORDER OF PERCENT MEMBERS PERFORMING)

TASKS	PERCENT MEMBERS PERFORMING (N=130)
I404 Schedule patients for appointments	100
I406 Verify patient eligibility for care	99
I386 File dental health records	95
I389 Initiate dental health records	93
I402 Retire dental health records of dependents or retirees	92
I393 Inventory dental health records	91
I405 Transfer dental health records	90
G320 Counsel subordinates concerning personal matters	65
H366 Conduct on-the-job training (OJT)	62
G317 Conduct supervisory performance feedback sessions	57
I401 Produce computer-generated documents, such as forms or correspondence	55
H367 Counsel trainees on training progress	55
G344 Inspect personnel for compliance with military standards	54
G360 Write recommendations for awards or decorations	54
I397 Monitor AF dental readiness assurance programs	53
G359 Write or endorse military performance reports	53
C119 Identify dental readiness classifications	52
G319 Conduct supervisory orientations for newly assigned personnel	52
I394 Maintain administrative files	52
C120 Identify types and requirements of exams	49
H378 Maintain training records or files	49
G346 Interpret policies, directives, or procedures for subordinates	45
G337 Evaluate personnel for compliance with performance standards	43
G343 Initiate actions required due to substandard performance of personnel	42
G338 Evaluate personnel for promotion, demotion, reclassification, or special awards	41

TABLE A10
SUPERVISOR JOB
(IN ORDER OF PERCENT MEMBERS PERFORMING)

TASKS	PERCENT MEMBERS PERFORMING (N=144)
G320 Counsel subordinates concerning personal matters	97
G360 Write recommendations for awards or decorations	97
G344 Inspect personnel for compliance with military standards	95
G359 Write or endorse military performance reports	92
G337 Evaluate personnel for compliance with performance standards	92
G317 Conduct supervisory performance feedback sessions	92
G319 Conduct supervisory orientations for newly assigned personnel	92
G346 Interpret policies, directives, or procedures for subordinates	90
G338 Evaluate personnel for promotion, demotion, reclassification, or special awards	90
G343 Initiate actions required due to substandard performance of personnel	89
G333 Establish performance standards for subordinates	87
G322 Determine or establish work assignments or priorities	83
I401 Produce computer-generated documents, such as forms or correspondence	78
G314 Conduct general meetings, such as staff meetings, briefings, conferences, or workshops	78
G345 Interpret automated dental treatment data	75
H368 Determine training requirements	74
H367 Counsel trainees on training progress	73
G312 Assign personnel to work areas or duty positions, other than to medical readiness mobility positions	72
G328 Develop or establish work schedules	71
G340 Identify and implement dental clinic process improvements	71
H366 Conduct on-the-job training (OJT)	68
H363 Brief personnel concerning training programs or matters	68
I400 Process or maintain automated dental treatment data	43

TABLE A11
SUPPLY JOB
(IN ORDER OF PERCENT MEMBERS PERFORMING)

TASKS	PERCENT MEMBERS PERFORMING (N=70)
A17 Order dental supplies	99
A18 Order nonmedical supplies	99
A12 Issue or log turn-ins of equipment or supplies	99
A8 Evaluate serviceability of equipment or supplies	99
A2 Coordinate procurement of equipment and supplies with appropriate agencies	97
A7 Evaluate supply problems	97
A13 Maintain commercial supply or federal supply catalogs	97
A20 Pick up or deliver equipment or supplies	96
A4 Draft or write justifications for supply-related matters	96
A25 Review back order reports	96
A9 Inventory medical supplies	94
A14 Maintain local purchase files	94
A10 Inventory nonmedical supplies	93
A11 Inventory property custodian authorization/custody receipt listings (CA/CRLs)	93
A16 Maintain user manuals for dental equipment	93
A33 Store flammable materials	93
A24 Review Air Force medical logistics letters (AFMLLs)	91
A22 Request corrective actions for defective equipment or utilities	91
A6 Establish storage requirements for equipment or supplies	91
A23 Research information in commercial supply publications	90
A29 Review issue turn-in lists or summaries	90
A15 Maintain supply management transaction and data listings	89
A34 Store hazardous materials, other than flammable materials	87
A1 Coordinate preventive maintenance requests with biomedical	87
A28 Review historical maintenance reports (HMRs)	86

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